# Capstone Project Proposal

The client for my first Capstone Project is Lending Club though any financial institution would benefit from such an analysis. I will be analyzing the loan data to create an algorithm, which would predict if a particular loan is good, neutral or bad (will default) to put it simplistically.

Lending has an inherent risk to it and the goal is to minimize that risk. Through this project, I can answer the ultimate question of whom should a loan be given and where the bank needs to be more cautious which would help Lending Club take necessary actions when processing a loan application.

I will be using the loan data for Lending Club that is available on kaggle. The below link can be used to access the data set.

Data link: <https://www.kaggle.com/wendykan/lending-club-loan-data>

This problem can be approached in a number of ways. I am planning to approach it like this:

1. Do some preliminary exploratory data analysis
   1. This would include doing some counts and running some comparisons.
2. Considering this is a supervised learning problem, I would think it is classification problem.
3. I would create a model which would then classify the loans in one of the three categories:
   1. Good
   2. Neutral
   3. Bad
4. Once I have the model, I can be present my insights with the help of visualization and draw conclusions.

My deliverables for this capstone project will include:

1. Code to reproduce my analysis
2. A document, which further summarizes what was done and the outcome in a visual format wherever possible.